CONTENTS OF VOLUME 1

Part 1, May 1956

The slender elliptic cone as a model for non-linear supersonic flow theory, by M. D. Van Dyke 1
On the collision of drops in turbulent clouds, by P. G. Saffman and J. S. Turner 16
Drift, by M. J. Lighthill 31
On the thrust due to an air jet flowing from a wing placed in a wind tunnel, by L. C. Woods 54
Vibrational relaxation in oxygen and nitrogen, by V. Blackman .. 61
Long waves on a rotating earth in the presence of a semi-infinite boundary, by J. Crease 86
The laminar boundary layer on oscillating plates and cylinders, by M. B. Glauert 97
Diffraction of a weak shock with vortex generation, by Nicholas Rott 111

Part 2, July 1956

Experiments on two-dimensional flow over a normal wall, by Mikio Arie and Hunter Rouse 129
The displacement effect of a sphere in a two-dimensional shear flow, by I. M. Hall 142
The refraction of sea waves in shallow water, by M. S. Longuet-Higgins 163
On steady laminar flow with closed streamlines at large Reynolds number, by G. K. Batchelor 177
The law of the wake in the turbulent boundary layer, by Donald Coles 191
On the flow in channels when rigid obstacles are placed in the stream, by T. Brooke Benjamin 227

Part 3, September 1956

On the rise of small air bubbles in water, by P. G. Saffman .. 249
Measurement of heat transfer from fine wires in supersonic flows, by John Laufer and Robert McClellan 276
On the propagation of weak shock waves, by G. B. Whitham .. 290
Forces, moments, and added masses for Rankine bodies, by L. Landweber and C. S. Yih 319
The wave drag at zero lift of slender delta wings and similar configurations, by M. J. Lighthill 337
Reviews 349

Part 4, October 1956

Supersonic flow past a bluff body with a detached shock. Part I. Two-dimensional body, by W. Chester 353
On the theory of hypersonic flow past plane and axially symmetric bluff bodies, by N. C. Freeman 366
A proposal concerning laminar wakes behind bluff bodies at large Reynolds number, by G. K. Batchelor 388
Shock compression of a perfect gas, by Cerda Evans and Foster Evans 399
The method of characteristics for steady supersonic rotational flow in three dimensions, by Maurice Holt 409
The influence of radiative transfer on cellular convection, by R. M. Goody 424
Propagation of spherical shock waves in stars, by Akira Sakurai .. 436
Reviews 454

Part 5, November 1956

The refraction of shock waves at a gaseous interface, by Robert G. Jahn 457
Supersonic flow past a bluff body with a detached shock. Part II. Axisymmetrical body, by W. Chester 490
An inequality concerning the production of vorticity in isotropic turbulence, by R. Betchov 497
The almost-rigid rotation of viscous fluid between concentric spheres, by Ian Proudman 505
The speed of drifting bodies in a stream, by J. R. D. Francis .. 517
Outline of a theory of turbulent shear flow, by W. V. R. Malkus .. 521
On the motion of small spheroidal particles in a viscous liquid, by P. G. Saffman 540
Reviews 554

Part 6, December 1956

The properties of equilibrium boundary layers, by A. A. Townsend 561
The generation of edge waves by moving pressure distributions, by H. P. Greenspan 574
Irrotational motion associated with free turbulent flows, by R. W. Stewart 593
The intensity of Aeolian tones, by O. M. Phillips 607
The wall jet, by M. B. Glauert 625
The flow of conducting fluids in circular pipes under transverse magnetic fields, by J. A. Shercliff 644
Reviews 667
Index to Volume 1 671